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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,157	11/18/2003	Anthony E. Faltesek	H0005694 8364/90288(1190)	5301

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EXAMINER	
LEE, PING	

ART UNIT	PAPER NUMBER
2614	

MAIL DATE	DELIVERY MODE
11/24/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/716,157	FALTESEK ET AL.	
	Examiner	Art Unit	
	Ping Lee	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 November 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,6-11,14,16,25 and 27-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,6-11,14,16,25 and 27-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 11/8/10 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 11, 14, 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, the phrase "via a microphone from spaced apart locations in the region" does not make sense. A single microphone is located at one position, not spaced apart locations.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over La Bonte et al. (hereafter La Bonte) (US 5,931,233) in view of Pegrum (US 2,966,209) and Iwamida (US 5,839,109).

Regarding claim 11, La Bonte discloses a method (Fig. 6) of monitoring a region comprising:

directly sensing human audible sounds audio signals via a microphone (Fig. 1) from spaced apart locations in the region (step 350);

automatically analyzing the sensed human audible sounds (step 354).

La Bonte fails to show the step of comparing the sensed human audible sounds with stored signatures of a fire and responsive to recognizing an audio fire signature of characteristic sounds emitted by a fire, displaying locations of origination therefore. La Bonte suggests interpreting the signal from the microphone in order to determine whether there is a fire approaching. Pegrum explicitly teaches that a fire is usually accompanied by a characteristic of noise or roaring sound (col. 1, lines 36-53). In order to interpret the sensed sound, Iwamida teaches comparing the detected sound from a microphone with a stored sound pattern (a pattern defines the characteristic of the type of the sound) (see Fig. 1). The nonspeech sound feature patterns could be any pattern that would benefit the user. As taught in Pegrum, the sound of fire has its own distinct characteristic. Thus, it would have been obvious to one of ordinary skill in the art, with

all three references before him/her, to modify La Bonte in view of Pegrum and Iwamida by storing fire signature of the approaching fire and comparing this stored signature with the sensed sound in order to determine whether this is a fire approaching and informing the user in a timely manner.

Regarding claim 14, La Bonte fails to recognize the sounds of individuals at one or more locations in the region. Iwamida teaches that the device can also interpret speech by storing speech patterns. Thus, it would have been obvious to one of ordinary skill in the art to further modify La Bonte with this feature as taught in Iwamida in order to provide addition information to the user who might not be able to hear verbal communication during emergency.

6. Claims 1, 2, 6-11, 14, 16, 25 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoi et al (hereafter Yokoi) in view of Pegrum and Iwamida.

Regarding claims 1, 6, 8, 11 and 14, Yokoi discloses a system comprising:

a plurality of audio modules (located at 3a, 3b, 3c and 3d in Fig. 1 or 21a in Fig. 2),

a common control unit (2) in communication with the plurality of audio modules;

an output device (8 in Fig. 1; 39 and 32 in Fig. 2) coupled to the control unit.

Yokoi fails to show that the control unit presents at least audio information received at various of the modules, via the output device, with the presented audio indicative of the presence of individuals and selected environmental conditions in the vicinity of the respective module; and which includes at least one of circuitry or software

to automatically analyze audio of characteristic sounds emitted by a fire and received at the control unit with respect to at least one fire signature, to establish if an alarm condition is present in the vicinity of at least one of the modules.

Yokoi teaches the use of a general fire detector mounted on the ceiling without providing much detail. Pegrum explicitly teaches that a fire is usually accompanied by a characteristic of noise or roaring sound (col. 1, lines 36-53). In order to interpret the sensed sound, Iwamida teaches comparing the detected sound from a microphone with a stored sound pattern (a pattern defines the characteristic of the type of the sound) (see Fig. 1). The nonspeech sound feature patterns could be any pattern that would benefit the user. As taught in Pegrum, the sound of fire has its own distinct characteristic. Iwamida further teaches that the device can also interpret speech by storing speech patterns. Thus, it would have been obvious to one of ordinary skill in the art, with all three references before him/her, to modify Yokoi in view of Pegrum and Iwamida by storing speech patterns and fire signature of the fire and comparing the stored patterns with the sensed sound in order to determine whether this is a fire and verbal communication, so the workers could be informed in a timely manner and the lives would be protected.

Regarding claim 2, although not clearly illustrated, an audio input device (39) is located at the control unit and transducers are located in at least some of the audio modules (24 or 41) (col. 4, lines 20-23; col. 6, line 58+; abstract).

Regarding claim 7, Iwamida teaches at least one circuitry or software (2) to filter one type of noise if combined with voice (see also col. 5, lines 29-45; in order separate

one sound event from all others, all others are suppressed). By storing fire signature in the memory, the claimed limitation is met when the system detects speech related sound.

Regarding claims 9 and 10, Yokoi teaches thermal sensor (5). The software as taught in Iwamida would be modified for processing thermal related signals as well as sonic signals.

Regarding claim 16, Iwamida teaches the step of suppressing one type of sounds from at least some of the sensed audio signals in order to more effectively recognize other sources of sounds (col. 5, lines 29-55; in order separate one sound event from all others, all others are suppressed). By storing fire signature in the memory, the claimed limitation is met when the system detects speech related sound.

Regarding claims 25 and 27-29, Yokoi further discloses a user interface.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 11 and 25 have been considered but are moot in view of the new ground(s) of rejection.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 571-272-7522. The examiner can normally be reached on Wednesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ping Lee/
Primary Examiner, Art Unit 2614

pwl